

REMARKS

Foreign Priority

The acknowledgement, in the Office Action, of a claim for foreign priority under 35 U.S.C. § 119(a)-(d), and that the certified copy of the priority document has been received, is noted with appreciation.

Status Of Application

Claims 4-6, 13-16 and 23-35 are pending in the application; the status of the claims is as follows:

Claims 4-6, 13, 14, 27-30 and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. Re. 34,460 to Ishiguro et al (cited in the Office Action dated 5/7/02) (hereinafter the "Ishiguro patent") in view of U.S. Patent No. 5,642,288 to Leung et al (cited in the Office Action dated 5/7/02) (hereinafter the "Leung patent").

Claims 15 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Ishiguro patent in view of the Leung patent, and further in view of U.S. Patent 4,912,518 to Matsuo et al (cited in the Office Action dated 5/7/02) (hereinafter the "Matsuo patent").

Claims 23 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,825,988 to Collard et al (cited in the Office Action dated 5/7/02) (hereinafter the "Collard patent") in view of the Leung patent, and further in view of the Ishiguro patent.

Claims 25 and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Collard patent in view of the Leung patent, in view of the Ishiguro patent, and further in view of the Matsuo patent.

Claims 31 and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,008,709 to Shinada et al (cited in the Office Action dated 5/7/02) (hereinafter the "Shinada patent") in view of U.S. Patent No. 5,987,171 to Wang (cited in the Office Action dated 5/7/02) (hereinafter the "Wang patent").

Claims 32 and 34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Shinada patent in view of the Wang patent, and further in view of U.S. Patent No. 5,930,006 to Yoshida et al (cited in the Office Action dated 5/7/02) (hereinafter the "Yoshida patent").

35 U.S.C. § 103(a) Rejections

The rejection of claims 4-6, 13, 14, 27-30 and 35 under 35 U.S.C. § 103(a), as being unpatentable over the Ishiguro patent in view of the Leung patent, is respectfully traversed based on the following.

The Examiner notes reliance upon the Leung patent is made for its disclosure regarding the storage of pixel density data and subsequently determining a state of the frame of pixel density data, a limitation of claim 4. The Examiner subsequently states on page 3 of the December 17, 2002 Office Action, "[t]he design choice that Ishiguro made of comparing data of an image in the determination of whether to prohibit selecting an inoperable mode would easily be modified with knowledge that is readily available throughout the art, therein comparing the pixel density data in the determination of whether to prohibit selecting an inoperable mode." Applicant respectfully asserts this does not meet the Examiner's burden of showing a "teaching, suggestion, or motivation" to combine the Ishiguro patent with what may or may not be a widely known process of storing and comparing pixel density data. The Examiner only asserted that the combination may be possible but failed to provide any reason why such a combination would be made. While many things are widely known and may easily be modified, especially in the world of information technology, this does not result in a teaching, suggestion, or motivation to combine these many things.

Unless and until the Examiner provides evidence of a teaching, suggestion, or motivation to combine the Ishiguro patent with the process of storing and comparing pixel density data, as exemplified by the Leung patent, even if such a modification would be easy, the Examiner has failed to establish a prima facie case of obviousness. As noted in the office action response submitted by the Applicant on August 6, 2002, and acknowledged by the Examiner in the present office action, the Ishiguro and Leung patents disclose different image processing purposes, and for this reason provide no teaching, suggestion, or motivation for combining these two references. Therefore, the Applicant respectfully asserts that the combination of the Ishiguro and the Leung patents does not render obvious claim 4.

Claims 5, 6 and 27 depend from claim 4. As claim 4 is considered non-obvious over the combination of the Ishiguro and Leung patents, claims 5, 6 and 27 are considered non-obvious for at least the same reasons.

Claim 13 includes the limitations that pixel density data be used to determine whether a mode is inoperable and to prohibit selection of a mode that is inoperable. As the Ishiguro patent has not been properly combined through a showing of teaching, suggestion, or motivation with the pixel density method as disclosed by the Leung patent, the Applicant asserts that the unsupported combination of the Ishiguro and Leung patents does not render obvious claim 13.

Claim 14 depends from claim 13. As claim 13 is considered to be non-obvious over the invalid combination of the Ishiguro and Leung patents, claim 14 is considered to be non-obvious for at least the same reasons.

Claim 28 includes the limitations that pixel density data be used to determine whether a mode is inoperable and to prohibit selection of a mode that is inoperable. As no teaching, suggestion, or motivation to combine the Ishiguro and Leung patents has been shown, the Applicant asserts that the combination of the Ishiguro and Leung patents does not render obvious claim 28.

Claims 29 and 30 depend, either directly or indirectly, from claim 28. As claim 28 is considered to be non-obvious over the combination of the Ishiguro and Leung patents, claims 29 and 30 are considered to be non-obvious for at least the same reasons.

Claim 35 includes the limitation that pixel density data be used to determine whether a stapler should operate. As the Ishiguro and Leung patents have not been properly combined through a showing of teaching, suggestion, or motivation, the Applicant asserts that the combination of the Ishiguro and Leung patents does not render obvious claim 35. This is especially true as the Leung patent discloses a method for selecting storage locations for digitized images. As digitized images will not require stapling, there is clearly no suggestion to combine the Ishiguro and Leung patents. The Applicant, therefore, asserts that the improper combination of the Ishiguro and Leung patents does not render obvious claim 35 in which stapler operation is controlled based upon pixel density data.

Accordingly, it is respectfully requested that the rejection of claims 4-6, 13, 14, 27-30 and 35 under 35 U.S.C. § 103(a) as being unpatentable over the Ishiguro patent in view of the Leung patent, be reconsidered and withdrawn.

The rejection of claims 15 and 16 under 35 U.S.C. § 103(a), as being unpatentable over the Ishiguro patent in view of the Leung patent, and further in view of the Matsuo patent, is respectfully traversed based on the following.

Claims 15 and 16 depend from claim 13 and by this dependence include the limitation that pixel density data be used to determine whether a mode is inoperable and to prohibit selection of a mode that is inoperable. As noted above, the Examiner has not provided any proper showing to combine the Ishiguro patent with pixel density data as exemplified by the Leung patent. Therefore, the Applicant asserts that claims 15 and 16 are not rendered obvious by the combination of the Ishiguro and Leung patents, as their combination is not valid. The Matsuo patent does not provide any teaching, suggestion or motivation for combining the Ishiguro and Leung patents. Further, the Matsuo patent determines frame size using a pair of sensors SE5 and SE3 in the subroutine illustrated in

Figure 14 and described in column 9, lines 16-37. Thus, the Matsuo patent does not teach determining frame size based upon pixel density data, but rather uses a timing method in which the time it takes for a document to pass by a sensor is used to determine the document's size. The Applicant thus asserts that the combination of the Ishiguro and Leung patents is not valid and that the Matsuo patent does not use pixel density data to prohibit selection of the two-side print mode as suggested by the Examiner. Because the Ishiguro and Leung patents cannot be properly combined and because the Matsuo patent does not inhibit two-side printing using pixel density data, the combination of the Ishiguro, Leung and Matsuo patents does not render obvious the invention of claim 15.

The combination of the Ishiguro, Leung and Matsuo patents does not render obvious the invention of claim 16 for reasons similar to claim 15. The Matsuo patent does not use pixel density data to determine frame size and thus cannot inhibit printing in an economy print mode based upon pixel density data as required by claim 16. Likewise, the Matsuo patent fails to provide a teaching, suggestion or motivation to combine the Ishiguro patent with pixel density data as exemplified by the Leung patent. For these reasons, the combination of the Ishiguro, Leung and Matsuo patents does not render obvious the invention of claim 16.

Accordingly, it is respectfully requested that the rejection of claims 15 and 16 under 35 U.S.C. § 103(a) as being unpatentable over the Ishiguro patent in view of the Leung patent, and further in view of the Matsuo patent, be reconsidered and withdrawn.

The rejection of claims 23 and 24 under 35 U.S.C. § 103(a), as being unpatentable over the Collard patent in view of the Leung patent, and further in view of the Ishiguro patent, is respectfully traversed based on the following.

As noted by the Examiner, the Collard patent does not disclose or suggest determining the state of a frame using pixel density data and, therefore, cannot anticipate the present invention. The Examiner, therefore, cited the Leung patent for its disclosure regarding the use of pixel density data. On page 4 of the December 17, 2002 Office Action, the Examiner states, "[t]he design choice that Collard made would easily be

modified with knowledge that is readily available throughout the art, therein comparing the pixel density data in the determination of the state of the frame.” As with the asserted combination of the Ishiguro and Leung patents above, the Examiner failed to show any teaching, suggestion or motivation for combining Collard with pixel density data as exemplified by the Leung patent. The Examiner only asserted that such a modification could easily be made. As before, the mere fact that a modification is possible does not provide any teaching, suggestion or motivation for making such a modification. Because the Examiner failed to provide a showing of such teaching, suggestion or motivation, the Examiner failed to establish a prima facie case of obviousness in view of the Collard and Leung patents. For these reasons, the Applicant asserts that the unsupported combination of the Collard and Leung patents does not render obvious claim 23 in which selection of an inoperable mode is prohibited based upon pixel density data.

The addition of the Ishiguro patent to the combination of the Collard and Leung patents similarly fails to render obvious the invention of claim 23. The Examiner attempts to combine three patents without showing any teaching, suggestion or motivation for doing so. As the Examiner failed to show any teaching, suggestion or motivation for combining these three patents, the Examiner failed to establish a prima facie case of obviousness for claim 23. As the Examiner failed to establish a prima facie case of obviousness, the Applicant asserts that the improper combination of the Collard, Leung and Ishiguro patents cannot render obvious the invention of claim 23, and thus claim 23 is considered patentable.

Claim 24 depends from claim 23. As claim 23 is considered to be non-obvious over the combination of the Collard, Leung and Ishiguro patents, claim 24 is considered to be non-obvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claims 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over the Collard patent in view of the Leung patent, and further in view of the Ishiguro patent, be reconsidered and withdrawn.

The rejection of claims 25 and 26 under 35 U.S.C. § 103(a), as being unpatentable over the Collard patent in view of the Leung patent, in view of the Ishiguro patent, and further in view of the Matsuo patent, is respectfully traversed based on the following.

Claims 25 and 26 depend from claim 23. As claim 23 is considered to be non-obvious over the combination of the Collard, Leung and Ishiguro patents, claims 25 and 26 are considered to be non-obvious for at least the same reasons. The addition of the Matsuo patent to the combination of the Collard, Leung and Ishiguro patents similarly fails to render obvious the inventions of claims 25 and 26. The Examiner failed to show any teaching, suggestion or motivation for combining a total of four patents. Until the Examiner can show some teaching, suggestion or motivation for combining the four patents of Collard, Leung, Ishiguro and Matsuo, no prima facie case of obviousness for claims 25 and 26 can be made. The mere assertion that such a modification based on the four patents could easily be made is not sufficient to be a teaching, suggestion or motivation for making such a modification. While it may be widely known that modifying the code of one application will alter its output in a certain way, this knowledge alone provides no teaching, suggestion or motivation for combining modifications from four different applications. Because the Examiner has not made a valid prima facie case of obviousness because no showing has been made that teaches, suggests or motivates one to combine the Collard, Leung, Ishiguro and Matsuo patents, these patents cannot render obvious the inventions of claims 25 and 26, and thus claims 25 and 26 are considered patentable.

Furthermore, the Matsuo patent does not use pixel density data to determine frame size when prohibiting two-side or economy print modes. The Matsuo patent includes separate sensors that detect the size of a document based upon the time it takes for the document to pass the sensors. Therefore, even if the Matsuo patent provided a suggestion to combine the Collard, Leung, Ishiguro and Matsuo patents (which it clearly does not), the Matsuo patent does not disclose or suggest prohibiting two-side or economy print modes based upon pixel density data as required by claims 25 and 26.

Accordingly, it is respectfully requested that the rejection of claims 25 and 26 under 35 U.S.C. § 103(a) as being unpatentable over the Collard patent in view of the Leung patent, in view of Ishiguro patent, and further in view of the Matsuo patent be reconsidered and withdrawn.

The rejection of claims 31 and 33 under 35 U.S.C. § 103(a), as being unpatentable over the Shinada patent in view of the Wang patent, is respectfully traversed based on the following.

As the Examiner notes, the Shinada patent teaches determining the size of an image corresponding to data stored in memory. However, the Shinada patent teaches this is based upon the magnification used when each original is copied. The Shinada patent discloses copying each of the originals requiring one magnification, changing the magnification, and then copying those originals requiring this new magnification. Thus, the size of the image corresponding to the data stored in memory is based upon magnification, and not the quantity or quality of the data stored in memory itself. In other words, the size of the image is based on the location of a magnification lens, not data of any sort. Thus, while the Wang patent may or may not use pixel density data to determine the size of an image corresponding to the pixel density data, this is completely unrelated to the position of a magnification lens. For this reason, there is no teaching, suggestion or motivation to replace a physical attribute (magnification or lens location) with an electronic process. In fact, the method of the Shinada patent requires storing a single number, the magnification, to represent the size of an image corresponding to the image stored in memory. Conversely, the method of the Wang patent would require significant processing to achieve the same result, the size of the image stored in memory. While computation speed has increased dramatically, it is far from clear that this would be reason enough to stop storing a single additional number in data. Therefore, as the Examiner failed to show any teaching, suggestion or motivation for combining the Shinada and Wang patents, but only asserts that such a modification would be possible, the Examiner failed to properly establish a prima facie case of obviousness. Thus, the Applicant asserts

that claims 31 and 33 are not rendered obvious by the combination of the Shinada and Wang patents, which have been improperly combined.

Accordingly, it is respectfully requested that the rejection of claims 31 and 33 under 35 U.S.C. § 103(a) as being unpatentable over the Shinada patent in view of the Wang patent, be reconsidered and withdrawn.

The rejection of claims 32 and 34 under 35 U.S.C. § 103(a), as being unpatentable over the Shinada patent in view of the Wang patent, and further in view of the Yoshida patent, is respectfully traversed based on the following.

Claims 32 and 34 depend from claims 31 and 33, respectively. As claims 31 and 33 are considered to be non-obvious over the improperly combined Shinada and Wang patents, claims 32 and 34 are likewise considered to be non-obvious for at least the same reasons. The addition of the Yoshida patent to the combination of the Shinada and Wang patents similarly fails to render obvious the invention of claims 32 and 34. The Yoshida patent fails to provide any teaching, suggestion or motivation for replacing a single number (the magnification in the Shinada patent) with processing of stored pixel density data. In fact, the Yoshida patent provides a third different way of determining the size of an image corresponding to stored pixel density data. In column 10, lines 3-7, the Yoshida patent describes determining the size of an image as a document passes a sensor SE51, and not by using pixel density data. Thus, the Examiner failed to show any teaching, suggestion or motivation for combining the Shinada, Wang and Yoshida patents. Because the Shinada, Wang and Yoshida patents have not been properly combined, they cannot render obvious the invention of claims 32 and 34.

Accordingly, it is respectfully requested that the rejection of claims 32 and 34 under 35 U.S.C. § 103(a) as being unpatentable over the Shinada patent in view of the Wang patent, and further in view of the Yoshida patent, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This response does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

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